

Abstract

A coated optical fiber, preferably a GGP optical fiber includes an optical fiber core, and a silica cladding over the optical fiber core, to provide a silica clad core. A permanent polymeric coating forms on the silica cladding during ultraviolet radiation of a photocurable composition containing a non-hydrolyzable photoinitiator. The coated optical fiber has a diameter from about 120 microns to about 160 microns and a relative frequency distribution of at least about 85% for dynamic fatigue measurements between about $49.2 \times 10^3 \text{ kg/cm}^2$ (700kpsi) and about $63.3 \times 10^3 \text{ kg/cm}^2$ (900kpsi).